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January 24, 1994

VIA FEDERAL EXPRESS

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FCC MAIL ROOM

Ms. Donna R. Searcy, Secretary  
Office of the Secretary  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, DC 20554

Re: Comments of Zenith Electronics Corporation  
Implementation of Section 17 of the Cable Television  
Consumer Protection and Competition Act of 1992;  
Compatability Between Cable Systems and Consumer  
Electronics Equipment (ET Docket No. 93-7)

Dear Ms. Searcy:

Enclosed please find an original and nine (9) copies of  
the Comments of Zenith Electronics Corporation regarding the  
above captioned matter, submitted pursuant to the Notice of  
Proposed Rule Making dated December 1, 1993.

Sincerely,

Stephen K. Weber

SKW/ds  
enclosure

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JAN 25 1994

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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554

In the Matter of

Implementation of Section 17 of the )  
Cable Television Consumer Protection )  
and Competition Act of 1992 )

ET Docket No. 93-7

Compatibility Between Cable Systems )  
and Consumer Electronics Equipment )

COMMENTS OF ZENITH ELECTRONICS CORPORATION

Zenith Electronics Corporation is pleased to submit the following response to the Notice of Proposed Rulemaking in the foregoing matter. Because Zenith has for many years manufactured televisions and cable systems equipment and marketed video cassette recorders, and more recently has been an active participant in the development of digital high-definition television, we believe we are in a position to provide a unique perspective on the relationship between cable systems and consumer electronics equipment. Zenith also has played a leading role in the extensive discussions of the Cable-Consumer Electronics Compatibility Advisory Group, and in our initial response to the Commission's request for information in this matter, proposed many of the elements which have emerged from those deliberations.

Accordingly, we believe that the product of the Advisory Group accurately represents the best thinking of a wide range of interests in the industry, most importantly the interests of consumers, and we strongly support its proposals. We would, however, like to amplify on

the reasons why it is important to retain certain of the proposals that may encounter some opposition.

1. First, we believe that the decoder interface proposed by the Advisory Group in conjunction with the Joint Engineering Committee clearly offers the most value for consumers, does the most to solve the compatibility problems, and best alleviates the legitimate concerns of participants in the industry. As one of the two suppliers of Multiport decoders, we believe it is now clear that Multiport (EIA-563) is simply not a solution for the present and future digital technological environment. In contrast to that standard, the proposed decoder interface will work with all existing scrambling systems and offer a technologically solid migration path to digital technology.
2. It is also absolutely essential that this proceeding not foreclose consumer electronics manufacturers from making and selling the kinds of televisions which will tune cable channels as they do today. We certainly recognize the need for the new "cable ready" standard which has emerged from the Joint Committee and which will allow for the full use of all television and VCR functions in a cabled environment with scrambling. However, given the tiering in cable systems and the number of locations in a consumer's home where only in-the-clear signals will be viewed, televisions that tune most or all cable signals but without all the features

required by the new standard will continue to serve many millions of consumers with a low-cost alternative. Any rule which directly or effectively prohibits such TVs to be made would certainly violate the spirit of the Act by forcing many consumers to absorb extra costs they may not want or need.

3. We also wish to emphasize support for the Advisory Group recommendation that cable ready receivers be required to tune to a minimum of 800 MHz. While there are those who promote a 1 GHz standard, such a requirement not only will be unnecessary in the vast majority of cable systems in view of the trends of technology, but also would add cost to consumer electronics equipment and thereby tend to discourage the widest possible dissemination of high compatibility equipment.

Virtually all current cable plants are built to a maximum of 750 MHz, and that is also the current trend in new plants, including the new digital network plants of the telecoms and cable companies. Those three plants in the country which were built to a maximum operating frequency of 1 GHz were done so to provide additional channel capacity. However, with the advent of digital compression and new transmission technologies, there is no longer the need to provide for the additional capacity in the physical plant.

The technology for digital compression is converging to MPEG2 and, as this is being written, tests are underway on digital modulation transmission technology. Zenith, as part of its HDTV research efforts, has developed robust transmission technologies that will carry multiple digitally-compressed standard-definition programs or two full HDTV signals within a standard 6-MHz cable channel bandwidth. This 16 VSB transmission technology, we believe, can transmit MPEG2 data packets at near ATM (asynchronous transfer mode) rates within current 6-MHz channel bandwidths. Along with digital compression, this will provide a huge increase in channel capacity within an 800 MHz spectrum without the cost increment to consumer equipment associated with a wider 1-GHz tuning frequency range.

4. Finally, we believe it is an essential element of the Advisory Group's recommendations that cable companies be allowed to make and identify a separate charge for the "set-back" box which would be a necessary part of the decoder interface concept for cable-ready receivers. Obviously, cable companies will have to be able to recover their investments in such equipment, and we do not believe this is the appropriate kind of charge to spread out among all consumers on a system. Moreover such a prohibition would be a disincentive to cable operators to promote the device.

\* \* \* \* \*

No participant can possibly be absolutely, 100 percent happy with every element of the Advisory Group's recommendations. However, it represents thousands of hours of work by very able people in different industries, and truly represents the best compromise or amalgam of that thinking and the divergent interests involved. Each element of the C3AG proposal is integrally related to others, and to change one, is, to a certain extent, to change all. Accordingly, we believe that it is in the best interests of consumers and all concerned that the Advisory Group proposal be accepted.

Respectfully submitted,

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Date: January 24, 1994